

1. – 84. (Canceled)

85. (Currently amended) A method of reducing mucus hypersecretion in the airways of a subject suffering from asthma in need of such treatment comprising administration to the airways of said subject a pharmaceutical formulation comprising a mucus-inhibitory amount of a N-terminal myristoylated peptide selected from the group consisting of the MANS peptide and a N-terminal myristoylated peptide fragment thereof, wherein said MANS peptide consists of a N-terminal myristoylated peptide of SEQ ID NO: 1, consisting of an amino acid sequence of from 10 to 50 contiguous amino acids that is identical to a contiguous sequence of amino acids beginning at the N terminal glycine residue of the MARCKS protein as shown in SEQ ID NO:4, wherein said N-terminal myristoylated peptide reduces MARCKS protein-related mucus hypersecretion, and whereby mucus hypersecretion in said airways is reduced compared to that which would occur in the absence of said peptide.

86.- 87. (Canceled)

88. (Currently amended) The method according to claim 85, further comprising removal of retained mucus secretions from the airways of said mammalian subject prior to administering said peptide administration of said formulation.

89. (Previously presented) The method according to claim 85, wherein said administration is by inhalation.

90. (Canceled)

91. (Currently amended) A pharmaceutical formulation comprising a N-terminal myristoylated peptide selected from the group consisting of the MANS peptide and a N-terminal myristoylated peptide fragment thereof comprising at least the first 10 amino acids of the MANS peptide, wherein said MANS peptide consists of a N-terminal myristoylated peptide of SEQ ID NO: 1, consisting of an amino acid sequence of from 10 to 50 contiguous amino acids that is identical to a contiguous sequence of amino acids beginning at the N terminal glycine residue of

~~the MARCKS protein as shown in SEQ ID NO:4~~, wherein said N-terminal myristoylated peptide reduces MARCKS protein-related mucus hypersecretion, and a pharmaceutically acceptable carrier.

92. (Previously presented) The pharmaceutical formulation according to claim 91, wherein said formulation is aerosolized.

93. (Previously presented) The pharmaceutical formulation according to claim 91, wherein said peptide is contained within liposomes.

94. - 115. (Canceled)

116. (Currently amended) The method according to claim 85, wherein said N-terminal myristoylated peptide ~~consists of~~ fragment comprises at least the first 15 contiguous amino acids of the MANS peptide beginning from the N-terminal glycine residue of the MARCKS protein as shown in SEQ ID NO:4.

117. (Currently amended) The pharmaceutical formulation according to claim 91, wherein said N-terminal myristoylated peptide ~~consists of~~ fragment comprises at least the first 15 contiguous amino acids of the MANS peptide beginning from the N-terminal glycine residue of the MARCKS protein as shown in SEQ ID NO:4.

118. (Currently amended) The method according to claim 85, wherein said N-terminal myristoylated peptide ~~consists of~~ fragment comprises at least the first 20 contiguous amino acids of the MANS peptide beginning from the N-terminal glycine residue of the MARCKS protein as shown in SEQ ID NO:4.

119. (Currently amended) The pharmaceutical formulation according to claim 91, wherein said N-terminal myristoylated peptide ~~consists of~~ fragment comprises at least the first 20 contiguous amino acids of the MANS peptide beginning from the N-terminal glycine residue of the MARCKS protein as shown in SEQ ID NO:4.

120. (Currently amended) The method according to claim 85, wherein said N-terminal myristoylated peptide ~~consists of~~ fragment comprises at least ~~25~~ the first 10 contiguous amino acids of the MANS peptide ~~beginning from the N-terminal glycine residue of the MARCKS protein as shown in SEQ ID NO:4.~~

121.- 135. (Canceled)